What is claimed is:

1. A light emitting diode (LED), comprising:

a semiconductor layer of a first polarity;

an active layer, located on the semiconductor layer of the first polarity; and

a semiconductor layer of a second polarity, located on the active layer, wherein at least one side of at least the active layer and the semiconductor layer of the second polarity is of irregular shape, thereby reducing the probability of reflecting the light emitted from the active layer, thus making light emitted from the active layer penetrate through the at least one side and be emitted outside the LED.

2. The LED according to claim 1, wherein the semiconductor layer of the first polarity is made of GaN.

3. The LED according to claim 1, wherein the active layer is made of InGaN.

4. The LED according to claim 1, wherein the semiconductor layer of the second polarity is made of GaN.

5. The LED according to claim 1, wherein the shape of the at least one side is selected from a group consisting of triangle, semicircle, and parabola.

6. The LED according to claim 1, wherein a deformed dimension of the at least

one side is greater than an equivalent emitting wavelength of the LED.

7. The LED according to claim 1, wherein an incident angle of the light emitted from the active layer to the at least one side is less than a reflective critical angle of the at least one side.

8. The LED according to claim 1, wherein at least the active layer and the semiconductor layer of the second polarity therein further have at least one valley penetrating from an upper surface of the semiconductor layer of the second polarity to a lower surface of the active layer, thereby increasing an efficiency of emitting the light emitted from the active layer to the outside of the LED.

9. The LED according to claim 8, further comprising a substrate located under the semiconductor layer of the first polarity, wherein the at least one valley further reaches to an upper surface of the substrate.

10. The LED according to claim 1, wherein the at least one side is formed by reactive ion etching (RIE).

11. A light emitting diode, comprising:

a semiconductor layer of a first polarity;

an active layer, located on the semiconductor layer of the first polarity; and

a semiconductor layer of a second polarity, located on the active layer, wherein

at least the active layer and the semiconductor layer of the second polarity therein have at least one valley penetrating from an upper surface of the semiconductor layer of the second polarity to a lower surface of the active layer, thereby increasing an efficiency of emitting the light emitted from the active layer to the outside of the LED.

12. The LED according to claim 11, further comprising a substrate located under the semiconductor layer of the first polarity, wherein the at least one valley further reaches to an upper surface of the substrate.

13. The LED according to claim 11, wherein the semiconductor layer of the first polarity is made of GaN.

14. The LED according to claim 11, wherein the active layer is made of InGaN.

15. The LED according to claim 11, wherein the semiconductor layer of the second polarity is made of GaN.

16. The LED according to claim 11, wherein at least one side of at least the active layer and the semiconductor layer of the second polarity is of irregular shape, thereby reducing the probability of reflecting the light emitted from the active layer, thus making light emitted from the active layer penetrate through the at least one side

and be emitted outside the LED.

17. The LED according to claim 16, wherein the shape of the at least one side is selected from a group consisting of triangle, semicircle, and parabola.

18. The LED according to claim 16, wherein a deformed dimension of the at least one side is greater than an equivalent emitting wavelength of the LED.

19. The LED according to claim 16, wherein an incident angle of the light emitted from the active layer to the at least one side is less than a reflective critical angle of the at least one side.

20. The LED according to claim 16, wherein the at least one side is formed by reactive ion etching.

21. A method of making a LED, comprising:

providing a semiconductor layer of a first polarity;

forming an active layer on the semiconductor layer of the first polarity; and

forming a semiconductor layer of a second polarity on the active layer, wherein at least one side of at least the active layer and the semiconductor layer of the second polarity is of irregular shape, thereby reducing the probability of reflecting the light emitted from the active layer, thus making light emitted from the active layer penetrate through the at least one side and be emitted outside the LED.

22. The method of making the LED according to claim 21, wherein the semiconductor layer of the first polarity is made of GaN.

23. The method of making the LED according to claim 21, wherein the active layer is made of InGaN.

24. The method of making the LED according to claim 21, wherein the semiconductor layer of the second polarity is made of GaN.

25. The method of making the LED according to claim 21, wherein the shape of the at least one side is selected from a group consisting of triangle, semicircle, and parabola.

26. The method of making the LED according to claim 21, wherein a deformed dimension of the at least one side is greater than an equivalent emitting wavelength of the LED.

27. The method of making the LED according to claim 21, wherein an incident angle of the light emitted from the active layer to the at least one side is less than a reflective critical angle of the at least one side.

28. The method of making the LED according to claim 21, wherein at least the

active layer and the semiconductor layer of the second polarity therein further have at least one valley penetrating from an upper surface of the semiconductor layer of the second polarity to a lower surface of the active layer, thereby increasing an efficiency of emitting the light emitted from the active layer to the outside of the LED.

29. The method of making the LED according to claim 28, further comprising providing a substrate before providing the semiconductor layer of the first polarity, wherein the semiconductor layer of the first polarity is located on the substrate, and the at least one valley further reaches to an upper surface of the substrate.

30. The method of making the LED according to claim 21, wherein the at least one side is formed by reactive ion etching.

31. A method of making a LED, comprising:

providing a semiconductor layer of a first polarity;

forming an active layer on the semiconductor layer of the first polarity; and

forming a semiconductor layer of a second polarity on the active layer, wherein at least the active layer and the semiconductor layer of the second polarity therein have at least one valley penetrating from an upper surface of the semiconductor layer of the second polarity to a lower surface of the active layer, thereby increasing an efficiency of emitting the light emitted from the active layer to the outside of the LED.

32. The method of making the LED according to claim 31, further comprising providing a substrate before providing the semiconductor layer of the first polarity, wherein the semiconductor layer of the first polarity is located on the substrate, and the at least one valley further reaches to an upper surface of the substrate.

33. The method of making the LED according to claim 31, wherein the semiconductor layer of the first polarity is made of GaN.

34. The method of making the LED according to claim 31, wherein the active layer is made of InGaN.

35. The method of making the LED according to claim 31, wherein the semiconductor layer of the second polarity is made of GaN.

36. The method of making the LED according to claim 31, wherein at least one side of at least the active layer and the semiconductor layer of the second polarity is of irregular shape, thereby reducing the probability of reflecting the light emitted from the active layer, thus making light emitted from the active layer penetrate through the at least one side and be emitted outside the LED.

37. The method of making the LED according to claim 36, wherein the shape of the at least one side is selected from a group consisting of triangle, semicircle, and parabola.

38. The method of making the LED according to claim 36, wherein a deformed dimension of the at least one side is greater than an equivalent emitting wavelength of the LED.

39. The method of making the LED according to claim 36, wherein an incident angle of the light emitted from the active layer to the at least one side is less than a reflective critical angle of the at least one side.

40. The method of making the LED according to claim 36, wherein the at least one side is formed by reactive ion etching.